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ABSTRACT

Various combinations of personality type components have been suggested as possible attributes of teaching style. However, there is little evidence available as to how these teaching styles relate to teaching effectiveness. This report compares various combinations of personality type with observable teaching effectiveness behaviors. One purpose of this study was to draw together two distinct lines of inquiry, classroom observations and teacher personality type, in an attempt to expand knowledge of how to improve teaching effectiveness by understanding the relationship between teacher behaviors and teacher personality type. A second purpose was to compare the various combinations of personality type with teaching effectiveness competencies to see which combination may have the most predictive power for teaching effectiveness. Results indicate that the temperament styles of Kiersey or Jung have a positive relationship to a number of important teaching effectiveness competencies and that certain styles have greater ease or difficulty in achieving high effectiveness scores. Subjects (N=43) in the study were high school vocational education teachers. Four tables display the data. (IAH)

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**RELATIONSHIP OF OBSERVABLE
TEACHING EFFECTIVENESS BEHAVIORS
TO MBTI PERSONALITY TYPES**

A Paper

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THE RELATIONSHIP OF OBSERVABLE TEACHING EFFECTIVENESS
BEHAVIORS TO MBTI PERSONALITY TYPES

Dr. Leverage Barrett

SUMMARY

In recent years there have been many references about the contribution personality type may play in determining teaching styles. Various combinations of personality type components have been suggested as possible attributes of teaching style. However, there is little evidence available as to how these teaching styles relate to teaching effectiveness. This report compares various combinations of personality type with observable teaching effectiveness behaviors.

Findings were as follows: 1. Kiersian and Jungian temperaments were the best combinations of personality type in predicting relationships with teaching effectiveness; 2. SFP teachers consistently had higher teaching effectiveness scores; 3. NF teachers were least effective; 4. The only single letter pair to show relationship to teaching effectiveness was T-F, with F being more effective.

INTRODUCTION

At the present time answers to improving the process of teaching and learning are much sought after, but difficult to find. One line of inquiry has been to examine the relationships of teacher personality and style to effectiveness of teaching. For example, using the Florida climate and control system observation instrument, De Novellis and Lawrence (1983) observed teachers in the classroom, found a positive relationship between observed teacher behavior and predictable behavior explained by personality type theory.

A study by Thompson (1984), using the MBTI, found a similar link between personality type and teacher planning. Using a naturalistic paradigm design, he interviewed teachers about their preferred roles in obtaining new teaching ideas, planning process, and typical methods of teaching. He demonstrated that teachers frequently performed these functions in ways consistent with their personality types.

Wright (1966) had school principals select their most successful and least successful teachers. The most successful and least successful teachers had distinctly different personality types.

Lorentz and Coker (1977) attempted to show the relationship of personality type and observable teacher behavior, while little relationship was found, the study did demonstrate that students reacted markedly to teachers personality differences.

Although previous studies attempted to link personality type of teachers to teaching effectiveness, few studies have attempted to examine observable teaching behaviors with personality type. One purpose of this study was to draw together two distinct lines of inquiry, classroom observations and teacher personality type, in an attempt to expand the knowledge of how to improve teaching effectiveness by understanding the relationship between teacher behaviors and teacher personality type. Another purpose was to compare the various combinations of personality type with teaching effectiveness competencies to see which combination may have the most predictive power for teaching effectiveness.

METHOD

Subjects. The sample drawn were those high schools offering vocational subjects within 150 miles of a midwestern city, of which seven schools were randomly selected. Vocational teachers within these seven schools agreed to participate without coercion. The sample of 43 teachers included teachers of agriculture, home economics, industrial education and business education. Teachers ranged in age from 25-51, all were white, and there were 27 men and 16 women. The number of vocational teachers per school varied from three to seven with a range of teaching experience from 5-25 years. Table 1 shows the MBTI Type distribution of the sample compared to the high school teacher sample in the Manual (Myers & McCulley, 1985). The ESTJ

type was significantly higher than the base comparative sample ($I = 2.48$, $p < .01$). Using the two-letter teaching styles suggested by Silver and Hansen (1981), there were significantly more STs ($I = 1.90$, $p < .001$), but fewer NFs ($I = 0.27$, $p < .001$) than the comparative sample. When comparing the styles suggested by Lawrence (1982), there were fewer ENs ($I = 0.41$, $p < .05$) and more ESs ($I = 2.11$, $p < .05$) than in the comparative sample. By Kiersian temperaments, (Kiersey & Bates, 1978) there were significantly fewer NFs ($I = 0.27$, $p < .001$) and more SJs ($I = 1.66$, $p < .001$), than the comparative high school teacher sample from the Manual. A sample of 1080 vocational students from subject teachers' classes had the following distribution: E-61%, I-39%, S-65%, N-35%, T-52%, F-48%, J-29%, P-71% or a group type of ESTP.

Insert Table 1 about here

Procedure. Two data collection instruments were used with each teacher. The MBTI, Form G, was given to all teachers. Teaching effectiveness data were determined by using the instrument, Classroom Observations Keyed for Effectiveness Research, COKER, (Coker, Coker, 1988). The COKER is a low inference, sign instrument that has evolved over the years from five other observational instruments: OSCAR 5V (Medley, 1973); STARS (Spaulding, 1976); FLACCS (Soar, Soar & Ragosta, 1971); TPOR (Brown, 1970); and CASES (Spaulding, 1976), and improved by Coker and Coker. The COKER is presently being used in several states to measure teaching effectiveness. The COKER is an instrument in which the observer simply records teacher behaviors without making judgments as to their appropriateness. The COKER is divided into the following categories of teacher behavior: presenting, questioning, and responding. Each of these three categories is coded in a cross matrix with student responses ranging from passive compliance to active involvement, both negatively and positively. Teaching methodology is recorded as well as teacher and student affect behavior.

Observers put no weight on what he/she observes, but simply records if an event occurs. A minimum of four observation sheets were coded per class hour by trained observers. Each teacher was observed on two separate days for a minimum of two hours per day over a three-year period. Thus, each teacher had at least 48 separate records of his/her performance. Twenty-four teaching effectiveness competencies, identified from the literature, were then given a score based on the observational data. Data analysis was done by using analysis of variance and Fisher's LSD test. Statistical significance was set at a $p < .05$ level. Comparisons were made with each of the 16 personality types and various combinations of type components to teacher effectiveness competencies as measured by the COKER. One objective of the study was to determine the effect personality type played in teaching effectiveness in vocational classes.

Results and Discussion

Another objective was to determine which combination of MBTI components may be the best predictor of teaching effectiveness for this context. Three combinations of "styles" as reported in the teaching literature were selected for analysis.

One combination of personality components to be compared was the Kiersian temperaments (Kiersey & Bates, 1978) of SJ, SP, NF and NT. These combinations had significant differences for 8 out of 24 teaching effectiveness competencies. (See table 2)

Insert Table 2 about here

The SP temperament scored highest. For Competency 1 (demonstrates enthusiasm), SP teachers scored higher than either SJ, NF, or NT teachers. The enthusiastic and upbeat behavior of the ESFP, which represented all SP teachers in this sample, is well documented, and was probably a strong contributing factor for this difference. Kiersey (1989) refers to SFP as "excitables." The observed behavior of these teachers was one of exuberance.

SP teachers were higher than NFs for Competency 4 (demonstrates proper listening skill). Kiersey and Bates (1978) note that SFPs have an acute awareness of even minute variations on a theme, a sensitivity to syntonic, symphonic changes; lights and sounds seem to come naturally.

For Competency 5 (maintains an active learning environment), SP teachers were higher than SJ, NF, and NT teachers. SP teachers are referred to by Kiersey and Bates (1978) and Golay (1982) as active spontaneous types. By observation, the SP teachers' classrooms were characterized as busy and full of action and hands-on experiences for students. Learning by doing could very well be the motto of the SP; thus, this result is not surprising.

SP teachers were higher than NTs in teaching effectiveness Competency 7 (provides positive feedback). This result is predictable from type theory. Kiersey & Bates (1978) note that NTs have difficulty giving and receiving praise. The SFPs in this sample were observed to give considerable verbal and non-verbal praise and demonstrated acceptance of student performance.

SP teachers were higher than NF for Competency 13 (demonstrates patience, empathy, and understanding). Much of the literature identifies the NF as the empathist as does Ro Bards (1986). It could have been predicted that the NF would have had the high score for this competency, but that was not the case. The SFP score of 60.5 was one of the highest scores received for any teaching competency. As vocational teachers, SFPs were in their element. Ro Bards referred to the ESFP as "unprejudiced, accepting and considerate."

For Competency 15 (helps students recognize progress and achievement), SP teachers were higher than NT teachers. The natural tendency of the ESFP, is to give an abundance of appreciation for achievement, while NT teachers tend to be more reserved in giving feedback to students.

For Competency 20 (provides examples of how task is to be completed), SP was higher than NF. Kiersey's (1989) explanation of the teaching style of the SP helps to explain this difference. The natural method of teaching for a SP is to show the learners how to do things.

The last competency to show a difference in teaching effectiveness scores by Kiersian temperaments was Competency 23 (allows for individual differences in evaluation). SJ and NT teachers were higher than NF teachers. One possible reason for the difference in these scores may be the fact that the SJ, SP, and NT teachers in the sample were part of a subset receiving special training on using type in teaching. By random selection no NF teachers were in the groups receiving special training.

The second combination to be tested was the two-letter combinations of IN, EN, IS, ES, referred to by Lawrence (1982) as a predictor of style. Data in Table 3 indicate that there were only 4 teaching effectiveness competencies of the 24 to show significant differences using this combination.

For Competency 7 (provides positive feedback on performance), ES teachers were higher than EN. The difference between ES and EN is not clear from the data or personality type theory.

For Competency 10 (implements effective classroom management), IN, ES, and IS teachers scored higher than EN teachers. Data from Table 1 may help explain the difference; 70% of the teachers were SJs, Kiersey & Bates (1978) suggest that SJs have a higher need for control than most other temperaments.

Insert Table 3 about here

ES and IS teachers were higher than EN for Competency 14 (monitors learner understanding and reteaches). S teachers did a better job of recognizing when students were not comprehending a concept and unlike the N teachers, were more likely to repeat themselves.

For Competency 15 (helps students recognize progress and achievement), ES teachers had higher scores than INs. This may be due in part to the ES teachers ability to see the nuances of student progress more readily than IN teachers who may be more subject-focused.

Like the Kiersian temperaments, the Jungian temperaments, as described by Myers and McCaulley (1985) and Silver and Hanson (1981), had 8 teaching effectiveness competencies that were significantly different between temperaments. Six of these competencies were the same ones identified by the Kiersian temperaments as being significantly different. The two competencies that were added from Table 2 were: Competency 14 (monitors learners' understanding), and 24 (uses convergent and divergent inquiry strategies).

Table 4 about here

The findings in Table 4 were similar to those in Table 2 in that the SFP teachers scored highest in all competencies that were different between temperaments. The first competency to show a difference was Number 4 (demonstrates listening skills), SF was higher than NF, (see the explanation of SP and NF differences for Table 2).

For Competency 5 (maintains an active learning environment), SF teacher scores were higher than ST and NF scores. Silver and Hanson (1981) characterize the teaching style of the SF as liking to introduce learning through games and activities that involve the students actively and physically. In contrast to the ST style of orderliness, the NF style of intellectual challenge contributes to less active learning, especially among students in this study who were largely S.

For Competency 7 (provides positive feedback on performance), SF teachers scored higher than ST, NF, and NT teachers. Myers and McCaulley (1985) suggested that the perceived role of an SF teacher is to encourage and support students, while the style of ST and NT teachers is to be less direct in positive feedback. The reason for the NF teacher low score is less clear.

SF teachers were higher than ST and NF teachers for Competency 13 (demonstrates patience, empathy and understanding). The primary orientation of the SF teaching style, as explained by Silver and Hanson (1981), offers an explanation for these differences. SF teachers are empathetic and people oriented; ST teachers are primarily outcome oriented; and NF teachers are innovatively oriented.

For Competency 14 (monitors learner understanding), SF teachers scored highest and NF teachers lowest. Since both of these temperaments are Fs the difference is not totally clear. One hypothesis is that the NF teachers may be out of their element in teaching primarily S students in vocational education (Barrett, 1989).

SF teachers were higher than ST, NF, and NT teacher for Competency 15 (helps students recognize progress and achievement). One explanation for this difference, as described by Silver and Hanson (1981), is that SF teachers prefer to become personally involved with students. The other styles may tend to maintain a greater distance and give less immediate feedback.

For Competency 23 (allows for individual differences in evaluation). SF, ST, and NT teachers were higher than NF teachers. The discussion for this competency provided earlier for Table 2 data is applicable here.

SF teachers were high and NF teachers low for Competency 24 (uses convergent and divergent inquiry strategies). Since both of these styles are Fs, the explanation of this result is unclear.

In summary, the temperament style that is the best predictor of teaching effectiveness for vocational students is not clear from this study. The results of differences between the Kiersian and Jungian temperaments were almost identical; however, the system of using the first two letters of type to identify teaching effectiveness was less helpful.

CONCLUSIONS

In one-third of the teaching effectiveness competencies measured in this study, significant differences were found between temperaments, and in the other two-thirds of the competencies, temperament was not a good indicator of differences in teaching effectiveness.

One consistent finding that occurred was that the SFP teachers in this study had consistently higher scores than the other types of teachers. Unfortunately, there are not many SFP teachers, and they tend not to stay in teaching (Barrett & Sorensen, 1985, Kiersey, 1987).

Another interesting result was the consistently low scores of NF teachers. Most studies of teaching show that the NF teachers are more effective than others. There are two possible reasons for our results. First, the NF teachers in this study were in most cases teaching vocational students who were largely sensing types, and often their psychological-type opposites. Second, the distinct NF style that is based on discussion of theory and less on practice, may not be best matched to the vocational setting. Third, by random selection, no NF teachers were in special sub-groups where extensive teaching effectiveness training was offered as part of a larger intervention strategy.

What do the results of this study suggest for the improvement of teaching? We can say that the temperament styles of Kiersey or Jung have a positive relationship to a number of important teaching effectiveness competencies, and that certain styles have greater ease or difficulty in achieving high effectiveness scores. Given this determination, it can be recommended that different teacher preparation strategies and in-service programs need to be planned to meet diverse strengths and weaknesses of teachers.

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**Table 1. Type Distribution of Vocational Teachers and
SRTT Comparison with the High School Teacher Sample
from the MBTI Manual
N=43 I=1% of N**

| | | | | |
|---|--------------------------------------|-------------------------------------|-------------------------------------|---|
| ISTJ n=9 (20.9%) I=1.76 | ISFJ n=3 (7.0%) I=.66 | INFJ n=0 (0.0%) I=0.00 | INTJ n=3 (7.0%) I=1.29 | E n=26 (60%) I=1.18 I n=17 (40%) I=0.81 S n=33 (77%) I=1.55*** N n=10 (23%) I=0.46*** T n=27 (63%) I=1.50** F n=16 (37%) I=.64** J n=35 (81%) I=1.19 P n 8 (19%) I=0.59 |
| ISTP n=0 (0.0%) I=0.00 | ISFP n=0 (0.0%) I=0.00 | INFP n=2 (4.6%) I=.74 | INTP n=0 (0.0%) I=0.00 | IJ n=15 (35%) I=0.98 IP n= 2 (5%) I=0.35 EP n= 6 (14%) I=0.76 EJ n=20 (47%) I=1.42 ST n=21 (49%) I=1.90*** SF n=12 (28%) I=1.17 NF n= 4 (6%) I=0.27*** NT n= 6 (14%) I=0.86 |
| ESTP n=0 (0.0%) I=0.00 | ESFP n=3 (6.0%) I=3.01 | ENFP n=1 (2.3%) I=0.20 | ENTP n=2 (4.7%) I=1.31 | SJ n=30 (70%) I=1.66*** SP n= 3 (7%) I=0.94 NP n= 5 (12%) I=0.48 NJ n= 5 (12%) I=0.44* TJ n=25 (58%) I=1.77*** TP n= 2 (5%) I=0.51 FP n= 6 (14%) I=0.62 FJ n=10 (23%) I=0.66 |
| ESTJ n=12 (27.9%) I=2.48** | ESFJ n=6 (13.9%) I=1.64 | ENFJ n=1 (2.3%) I=0.26 | ENTJ n=1 (2.3%) I=0.54 | IN n= 5 (12%) I=0.52 EN n= 5 (12%) I=0.41* IS n=12 (28%) I=1.06 ES n=21 (49%) I=2.11* *p<.05 **p<.01 ***p<.001 |

**Table 2. Mean Scores of Teacher Effectiveness for
High School Teachers by Kiersian Temperaments**

| Teacher Effectiveness Competency | Teacher Temperament Means | | | |
|--|---------------------------|-----------|-----------|-----------|
| | SJ N=30 | SP N=3 | NF N=4 | NT N=6 |
| 1. Demonstrates Enthusiasm for Teaching | 49.3b | 60.2a | 49.4b | 47.5b |
| 2. Provides Learning Experiences and Principles for Use Outside School | 51.6 | 46.7 | 47.9 | 49.8 |
| 3. Provides Opportunities for Successful Experiences | 49.0 | 53.1 | 49.9 | 53.3 |
| 4. Demonstrates Proper Listening Skills | 50.5 | 58.3a | 44.7b | 47.8 |
| 5. Maintains an Active Learning Environment | 49.7b | 60.7a | 48.5b | 49.0b |
| 6. Encourages Students to Ask Questions | 50.9 | 54.7 | 54.2 | 48.2 |
| 7. Provides Positive Feedback on Performance | 50.8 | 59.4a | 48.4 | 44.2b |
| 8. Develops and Demonstrates Problem Solving Skills | 51.0 | 53.4 | 47.2 | 52.4 |
| 9. Gives Clear Directions and Explanations | 51.2 | 50.4 | 51.4 | 47.6 |
| 10. Implements an Effective Classroom Management System for Positive Behavior | 49.6 | 50.9 | 45.4 | 48.5 |
| 11. Provides a Clear Description of the Learning Task and Its Content | 49.9 | 51.8 | 50.5 | 50.8 |
| 12. Uses a Variety of Instructional Strategies | 51.4 | 49.5 | 47.6 | 50.5 |
| 13. Demonstrates Patience, Empathy and Understanding | 49.3 | 60.5a | 46.9b | 52.5 |
| 14. Monitors Learner, Understanding and Reteaches | 52.2 | 53.9 | 46.1 | 47.8 |
| 15. Helps Students Recognize Progress and Achievements | 50.6 | 57.4a | 47.5 | 46.1b |
| 16. Provides Learners Practice and Review | 51.1 | 52.1 | 49.6 | 47.0 |
| 17. Demonstrates Ability to Work With Individuals, Small or Large Groups | 49.5 | 49.7 | 48.4 | 52.0 |
| 18. Assists Students in Discovering and Correcting Errors and Inaccuracies | 49.9 | 51.4 | 45.7 | 51.4 |
| 19. Teacher Stimulates Student Interest | 51.4 | 50.9 | 50.1 | 48.2 |
| 20. Provides Examples of How Task is to be Completed | 50.4 | 57.5a | 45.2b | 52.6 |
| 21. Uses a Variety of Resources and Materials | 51.2 | 46.7 | 54.5 | 46.1 |
| 22. Uses a Variety of Cognitive Levels in Strategies of Questioning | 50.4 | 55.4 | 50.0 | 49.6 |
| 23. Allows for Individual Difference in Evaluation | 51.4a | 47.5 | 39.7b | 52.5a |
| 24. Uses Convergent and Divergent Inquiry Strategies | 50.0 | 54.5 | 45.6 | 49.8 |

Note: Letter "a" is significantly higher than letter "b" ($P < .05$) with Fisher's LSD test.

Table 3. Teacher Effectiveness Mean Scores for High School Teachers by First Two Letter MBTI Combinations

| Coker Teacher Effectiveness Competency | Means Two Letter Combinations | | | |
|---|----------------------------------|-----------|------------|------------|
| | EN N=5 | IN N=5 | ES N=21 | IS N=12 |
| 7. Provides Positive Feedback on Performance | 44.6b | 47.2 | 54.0a | 47.4 |
| 10. Implements Effective Classroom Management | 39.1b | 55.3a | 49.4a | 50.3a |
| 14. Monitors Learner, Understanding and Reteaches | 45.0b | 49.3 | 52.7a | 51.9a |
| 15. Helps Students Recognize Progress and Achievement | 49.3 | 44.1b | 53.4a | 47.4 |

NOTE: Letter "a" is significantly higher than "b" ($p < .05$) with Fisher's LSD test.

Table 4 Mean Scores of Teaching Effectiveness For High School Teachers by Jungian Temperaments

| Teaching Effectiveness Competency | Temperaments | | | |
|--|--------------|------------|-----------|-----------|
| | SF N=12 | ST N=21 | NF N=4 | NT N=6 |
| 4. Demonstrates Proper Listening Skills | 56.1a | 49.8 | 45.1b | 48.0 |
| 5. Maintains an Active Learning Environment | 58.1a | 47.1b | 49.0b | 49.1b |
| 7. Provides Positive Feedback on Performance | 58.0a | 48.1b | 48.4b | 44.3b |
| 13. Demonstrates Patience, Empathy and Understanding | 57.2a | 46.4b | 47.1b | 53.0 |
| 14. Monitors Learner, Understanding and Reteaches | 54.0a | 52.0 | 46.1b | 48.0 |
| 15. Helps Students Recognize Progress and Achievements | 59.1a | 47.0b | 48.0b | 46.1b |
| 23. Allows for Individual Difference in Evaluation | 54.0a | 50.0a | 40.1b | 52.5a |
| 24. Uses Convergent and Divergent Inquiry Strategies | 55.9a | 48.0 | 46.0b | 50.1 |

Note: Letter "a" is significantly higher than "b" ($p < .05$) with Fisher's LSD test.